Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of manufacturing a metallic foam from a bulk-solidifying amorphous alloy comprising:

providing a molten bulk-solidifying amorphous alloy;

introducing a plurality of gas bubbles, to the molten alloy at a temperature about the liquidus temperature of the alloy to form a precursor at a first pressure such that the bubbles are formed with a specified internal bubble pressure;

holding the conditions of the precursor after introduction of the plurality of gas bubbles steady for a specified period of time such that a proportion of the plurality of bubbles above a chosen size threshold are removed from the molten precursor via flotation such that the bubble size distribution within the precursor is at least partially homogenized;

at least partially cooling the precursor to a processing temperature below the nose of the crystallization curve of the alloy and above the glass transition temperature of the alloy at a cooling rate such that the molten alloy substantially maintains its amorphous state; and

expanding the bubbles in the precursor while the precursor is at the processing temperature by providing a pressure gradient to the precursor where the pressure during the expansion is lower than the internal bubble pressure of the introduced gas bubbles formed during the precursor forming step.

2. (Original) The method of claim 1, further comprising quenching the expanded precursor after expanding the bubbles, where the quenching is conducted at a cooling rate such that the at least a partial amorphous atomic structure is formed in the metallic foam object.

3. (Previously Presented) The method according to claim 1, wherein the precursor is cooled to below the glass transition temperature sufficiently fast to form a solidified precursor material with substantially amorphous atomic structure, and further comprising heating the solid precursor material into the super-cooled region of the bulk- solidifying amorphous alloy above the glass transition temperature of the alloy and below the nose of the crystallization curve of the alloy to expand the bubbles.

4. (Original) The method according to claim 1, wherein the temperature of the precursor is reduced to within the supercooled region of the bulk solidifying amorphous alloy during cooling sufficiently fast to avoid any substantial crystallization.

5. (Previously Presented) The method according to claim 1, wherein the gas bubbles are mechanically generated in the molten alloy.

6. (Original) The method according to claim 1, wherein the gas bubbles are introduced to the molten alloy through in gas form through a nozzle.

7. (Original) The method according to claim 1, wherein the gas bubbles are introduced to the molten alloy by adding an gas releasing agent to the molten alloy.

8. (Previously Presented) The method according to claim 1, wherein a volume fraction of < 30% of the plurality of bubbles have sizes between 1 μm and l mm.

9. (Original) The method according to claim 1, wherein at least 50% by volume of the metallic foam has an amorphous atomic structure.

10. (Previously Presented) The method according to claim 1, further including regulating the process parameters during the expansion in accordance with a calculated size dependent flotation velocity of the bubbles as given by the equation:

$$V_{sed} = 2a^2(\rho_l-\rho_g)g/9\eta$$

to control the homogeneity, size and volume distribution of the bubbles in the precursor.

11. (Original) The method according to claim 1, wherein the step of introducing gas bubbles to form the precursor occurs at a pressure of about 50 bar or more.

12. (Previously Presented) The method according to claim 1, wherein the precursor is maintained within a temperature range such that the precursor has a viscosity of about 10^6 Pa•s to 10^{12} Pa•s during the expanding step.

13. (Previously Presented) The method according to claim 1, wherein the expansion of the precursor is carried out in one of either a mold or a cast.

14. (Previously Presented) The method according to claim 1, wherein the bubbles of the metallic foam have a size distribution of from about 1 μm to about 10 μm.

15. (Original) The method according to claim 1, wherein the bulk solidifying amorphous alloy is a Zr-base amorphous alloy.

16. (Original) The method according to claim 1, wherein the bulk solidifying amorphous alloy has a ΔT of at least 60 °C.

17. (Original) The method according to claim 1, wherein the bulk solidifying amorphous alloy is an Fe-base amorphous alloy.

18. (Previously Presented) The method according to claim 1, wherein the plurality of bubbles is one of either close or open celled.

19. - 29. (Canceled)